

Claims:

- 1 1. An electronic device comprising:
2 a sigma delta modulation loop circuit for use in a device having a radio frequency
3 receiver, wherein the loop is configured to compensate for noise that is generated by the
4 sigma delta loop and that affects radio signals within the range of a radio frequency band
5 according to the operating frequency of the radio frequency tuner.

- 1 2. An electronic device according to Claim 1 wherein that compensation is the
2 placement of a Noise Transfer Function zero at the operating frequency of the radio frequency
3 tuner.

- 1 3. An electronic device according to Claim 2, wherein the sigma delta modula-
2 tion loop further includes logic configured to adjust its noise transfer function of the loop in
3 response to a change in the operating frequency of the radio receiver such that the noise
4 generated by the sigma delta loop that affects signals received by the radio receiver are
5 compensated for by the sigma delta modulator loop.